

GenCore version 5.1.7
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OM protein - protein search, using sw model

Run on: May 5, 2006, 14:31:21 ; Search time 24.1524 Seconds
(without alignments)
1958.002 Million cell updates/sec

Title: US-10-017-479a-2

Perfect score: 2994

Sequence: 1 MEIIGEGOPPPVKCSNFPA.....NSFENQAQYAAALGNKTH 572

Scoring table: BLOSUM62

Searched: 572060 seqs, 82675679 residues

Total number of hits satisfying chosen parameters: 572060

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA: *
1: /cgn2_6/ptodata/1/1aa/5.COMB.pep: *
2: /cgn2_6/ptodata/1/1aa/6.COMB.pep: *
3: /cgn2_6/ptodata/1/1aa/H.COMB.pep: *
4: /cgn2_6/ptodata/1/1aa/PCUS.COMB.pep: *
5: /cgn2_6/ptodata/1/1aa/PCUS.COMB.pep: *
6: /cgn2_6/ptodata/1/1aa/backfile1.pep: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1742	58.2	368	2	US-09-270-767-42029
2	1026	34.3	599	2	US-09-949-016-9866
3	898	30.0	169	2	US-09-270-767-57286
4	896	29.9	626	2	US-09-556-916-20
5	895.5	29.9	627	2	US-09-556-916-8
6	891	29.8	626	2	US-09-556-916-14
7	891	29.8	626	2	US-09-556-916-22
8	890.5	29.7	627	2	US-09-556-916-2
9	890.5	29.7	627	2	US-09-556-916-10
10	889.5	29.6	627	2	US-09-949-016-6840
11	886	29.6	626	2	US-09-556-916-16
12	885.5	29.6	627	2	US-09-556-916-4
13	879.5	29.4	601	2	US-09-949-016-9977
14	760	25.4	580	2	US-09-556-916-24
15	759.5	25.4	581	2	US-09-556-916-12
16	755	25.2	580	2	US-09-556-916-18
17	754.5	25.2	581	2	US-09-556-916-6
18	711	23.7	561	2	US-09-949-016-8161
19	605.5	20.2	527	2	US-09-602-787A-516
20	577	19.3	230	2	US-09-270-767-43713
21	498.5	16.6	194	2	US-09-270-767-59102
22	463	15.3	180	2	US-09-270-767-42669
23	457	15.3	470	2	US-09-543-681A-5952
24	397	13.3	233	2	US-09-489-847-176
25	362	12.1	132	2	US-09-270-767-57987
26	357	11.9	335	2	US-09-602-787A-518
27	344	11.5	524	2	US-09-134-001C-5457

28	258.5	8.6	421	2	US-09-248-796A-20749	Sequence 20749, A
29	187.5	6.3	624	2	US-09-543-681A-4343	Sequence 4343, Ap
30	179.5	6.0	548	2	US-09-902-540-11870	Sequence 11870, A
31	176.5	5.9	596	2	US-09-902-540-13547	Sequence 13547, A
32	172.5	5.8	493	2	US-09-540-236-2120	Sequence 2120, Ap
33	166.5	5.6	302	2	US-09-902-540-10445	Sequence 10445, A
34	162	5.4	470	2	US-09-438-185A-209	Sequence 209, App
35	159	5.3	430	2	US-09-134-001C-2981	Sequence 2981, Ap
36	150.5	5.0	547	2	US-09-489-039A-13843	Sequence 13843, A
37	147	4.9	443	2	US-09-602-787A-532	Sequence 532, App
38	137	4.6	167	2	US-09-248-796A-20740	Sequence 20740, A
39	137	4.6	363	2	US-09-270-767-42613	Sequence 42613, A
40	136.5	4.6	478	2	US-09-134-001C-4637	Sequence 4637, Ap
41	136.5	4.6	494	2	US-09-543-681A-7033	Sequence 7033, Ap
42	135	4.5	694	2	US-09-252-991A-22637	Sequence 22637, A
43	134.5	4.5	436	2	US-09-583-110-4729	Sequence 4729, Ap
44	134.5	4.5	440	2	US-09-107-433-5201	Sequence 5201, Ap
45	134	4.5	437	2	US-09-543-681A-6984	Sequence 6984, Ap

ALIGNMENTS

RESULT 1
US-09-270-767-42029
Sequence 42029, Application US/09270767
Patent No. 6703491
GENERAL INFORMATION:
APPLICANT: Homburger et al.
TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
FILE REFERENCE: File Reference: 7326-094
CURRENT APPLICATION NUMBER: US/09270,767
CURRENT FILING DATE: 1999-03-17
NUMBER OF SEQ ID NOS: 62517
SOFTWARE: Patentln Ver. 2.0
SEQ ID NO 42029
LENGTH: 368
TYPE: PRT
ORGANISM: Drosophila melanogaster
FEATURE:
OTHER INFORMATION: Xaa means any amino acid
US-09-270-767-42029

Query Match 58.2% Score 1742; DB 2; Length 368;
Best Local Similarity 93.8% Pred. No. 2.6e-180;
Matches 333; Conservative 0; Mismatches 22; Indels 0; Gaps 0;

QY	1	MEIIGEGOPPPVKCSNFPAHMKGLVFLVPLCLFVMLINEGAEFRCHYLIVMAIFW	60
DB	14	MEIIGEGOPPPVKCSNFPAHMKGLVFLVPLCLFVMLINEGAEFRCHYLIVMAIFW	73
QY	61	VTEALPLVYTSMTPIVAFPIWGINSDDQCRLYKDTLVWFMGIMVALAVEYCNLHKL	120
DB	74	VTEALPLVYTSMTPIVAFPIWGINSDDQCRLYKDTLVWFMGIMVALAVEYCNLHKL	133
QY	121	ALRYIQVVGSGSPRLHGLIMVTFLSMTLSNACTMMCGTIOAVLEILOAGVCKINH	180
DB	134	ALRYIXXX	193
QY	181	EPQYQIYGKKNKNEDEPPYPTKTLTCYVIGIAVASSLGGCGTITGATNLTFFKGIYEAR	240
DB	194	EPQYQIYGKKNKNEDEPPYPTKTLTCYVIGIAVASSLGGCGTITGATNLTFFKGIYEAR	253
QY	241	FKNSTEDMDPTEFNFYSVPSMLVYTLTLFVFLQNHFMGLMPKSKAEOVORGEGADVA	300
DB	254	FKNSTEDMDPTEFNFYSVPSMLVYTLTLFVFLQNHFMGLMPKSKAEOVORGEGADVA	313
QY	301	KKVTDQYKDLGPMISHIQLMILFIFMVVYFPRKGIIFLGWADLNSKDIRNS	355
DB	314	KKVIDQYKDLGPMISHIQLMILFIFMVVYFPRKGIIFLGWADLNSKDIRNS	368

RESULT 2

```
US-09-949-016-9866
; Sequence 9866, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CLO01307
; CURRENT APPLICATION NUMBER: US/09/949,016
; PRIOR FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 9866
; LENGTH: 599
; TYPE: PRT
; ORGANISM: Human
US-09-949-016-9866
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Query Match      34.3%; Score 1026; DB 2; Length 599;
Best Local Similarity 37.2%; Pred. No. 3.4e-102;
Matches 219; Conservative 124; Mismatches 189; Indels 56; Gaps 10;
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QY 26 LVFLVPLVLPCLPVMNLNGAEFRQYLLVVAIFMVTEALPLYTSMIPVAFPIGIMS 85
DB 22 LIFVFPVPLLPPLVLPVSKAYACAYAILMALFMCIEALPLVATLALFPLIPFMGIVD 81
QY 86 SDQCRLYFQDTLVMPFGIMVAVAVCYNHRKLAIRVIOYGCSPRRLLHGLINVTM 145
DB 82 ASEVAVELKDSNLIFGGLVLAIVERHMLHKKIARVLIIGVBPAPILISFMLVTAF 141
QY 146 LSMWISNACTAMCPITIOAVLELOAGVCKINHEPOYIOVGKKNKNEDEPPYPTK- 203
DB 142 LSMWISNACTAMCPITIOAVLELOAGVCKINHEPOYIOVGKKNKNEDEPPYPTK- 203
QY 204 -----ITLCYVLIAGVASSLGGCGTIIIGTATNLTFRK 235
DB 196 TKLDNGCALPVTSSASSEGRAHLISQKHLHTQCMSLCYCSASIGIATLTGTAPNLVLQ 255
QY 236 IYEAERFKNSTBOMDFPFMYSVPSMLVYTLTLTFVLOHFMGL-WRPKSKEAOEYQGR 294
DB 256 QINSLEPONGNVVAFASWFSFAFPTWVILLILLMLMLQILFLGFRKNGIGERKO--- 312
QY 295 EGADVAKKVIDORYKDLGPMSEHIOVMILFIFVWVVFTRKKGIFLGWADLL--NSKD- 351
DB 313 EGOOAAVCVIOTEHRLGLPMTFAKKAISILFVILVLMFTREKGFLLGMGNLAFPAKGE 372
QY 352 --IRNSMPTFVVVVMCMPLPANTAFRLRYCTRGGPV--PTGPTPSLITWKFIOTKVPMGL 407
DB 373 SMSVDGTVAFIGIMFIPSKFPGLODPENPGKAPLG---LLDMKTVAQKPMNI 428
QY 408 VPLIGGFALAEBSKOSGMAKLIGNALIGKVLPSGVLLVYLLVAVPLTASSNVAIAN 467
DB 429 VLLIGGFALAEBSKOSGMAKLIGNALIGKVLPSGVLLVYLLVAVPLTASSNVAIAN 467
QY 468 IIPVLAEMSLAIEIHPVLYLPLAGLACSNVAFHLPVSTPPNALVAGYAIRTKDMAIAGI 527
DB 489 IIPVLAEMSLAIEIHPVLYLPLAGLACSNVAFHLPVSTPPNALVAGYAIRTKDMAIAGI 527
QY 528 GPFITITITLFCVQCQTMGLVVPNLNSFPMQIYAA---ALGNKT 571
DB 549 LNIITIGVLIITLAINSGIPLF-SLHSFSMAQSNNTTACPLSLANTT 595
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RESULT 3
US-09-270-767-57286
; Sequence 57286, Application US/09270767
; Patent No. 6703491
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; GENERAL INFORMATION:
; APPLICANT: Homburger et al.
; TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
; FILE REFERENCE: File Reference: 7326-094
; CURRENT APPLICATION NUMBER: US/09/270,767
; CURRENT FILING DATE: 1999-03-17
; NUMBER OF SEQ ID NOS: 62517
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 57286
; LENGTH: 169
; TYPE: PRT
; ORGANISM: Drosophila melanogaster
US-09-270-767-57286
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Query Match      30.0%; Score 898; DB 2; Length 169;
Best Local Similarity 100.0%; Pred. No. 4e-89;
Matches 169; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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QY 187 VGGNKKNNDEPPYPTKITLTCYVLIAGVASSIGCGTIIIGTATNLTFRKIYEAPKNGTE 246
DB 1 VGGNKKNNDEPPYPTKITLTCYVLIAGVASSIGCGTIIIGTATNLTFRKIYEAPKNGTE 60
QY 247 QMDPFPMFYSVPSMLVYTLTLTFVLOHFMGLWRPKSKEAOEYQGRGEGADVAKKVIDQ 306
DB 61 QMDPFPMFYSVPSMLVYTLTLTFVLOHFMGLWRPKSKEAOEYQGRGEGADVAKKVIDQ 120
QY 307 RYKDLGPMSEHIOVMILFIFVWVVFTRKKGIFLGWADLLNSKDINRS 355
DB 121 RYKDLGPMSEHIOVMILFIFVWVVFTRKKGIFLGWADLLNSKDINRS 169
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RESULT 4
US-09-556-916-20
; Sequence 20, Application US/09556916
; Patent No. 6548271
; GENERAL INFORMATION:
; APPLICANT: Turner, Alex
; APPLICANT: Zambrowicz, Brian
; APPLICANT: Nehls, Michael
; APPLICANT: Friedrich, Glenn
; APPLICANT: Sands, Arthur T.
; TITLE OF INVENTION: No. 6548271el Human Transporter Proteins
; FILE REFERENCE: 6535-041-999
; CURRENT APPLICATION NUMBER: US/09/556,916
; CURRENT FILING DATE: 2000-04-21
; NUMBER OF SEQ ID NOS: 32
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 20
; LENGTH: 626
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-556-916-20
```

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Query Match      29.9%; Score 896; DB 2; Length 626;
Best Local Similarity 32.5%; Pred. No. 4.9e-88;
Matches 205; Conservative 122; Mismatches 188; Indels 116; Gaps 15;
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QY 24 KGLVFLVPLVLPCLPVMNLNGAEFRQYLLVVAIFMVTEALPLYTSMIPVAFPIGMI 83
DB 12 KLLLVCCVPLLLPLPLVLPVHSSEASCAVYLIVAVVVSVAFLVGAALVPAFLYPPGV 71
QY 84 MSSDQCRLYFQDTLVMPFGIMVAVAVCYNHRKLAIRVIOYGCSPRRLLHGLINVTM 143
DB 72 LRSNEVAAEFYKQNTLLLVGICVAAAVEKMNHKKIARVLIIGVBPAPILISFMLVTAF 131
QY 144 MFLSMWISNACTAMCPITIOAVLELOAGVCKINHEPOYIOVGKKNKNEDEPPYPTK- 198
DB 132 TILSMWISNACTAMCPITIOAVLELOAGVCKINHEPOYIOVGKKNKNEDEPPYPTK- 198
QY 199 ----- 198
DB 184 KNSQPSLELIFVNEESNADLTITMHNENLNGVPSITNPITKANQHGKQHPQEKPOVL 243
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QY 199 -PYPTK-----ITLCYUIGIAYASSLGGCGTITGTATNLTFKGIYEAPFK 243
DB 244 TSPRKQKLNKRYSHHDQMI CKCLSLSYSATIGLTTIIGTSTSL-----IFLEHFN 299
QY 244 ----STEQMDPFTPEFYSVPSMLVYTLTFVFLQWHEMGL-WRPKSKAEQVORGEGADV 299
DB 300 QYPAEAVNFGTWLFEFSPISLIMLVSWFMWMLFLGCGNFKETCSLKKKTKRE--Q 357
QY 300 AKKVIDQRYKDLGPMGSHIEIQWMLFIFMVVMYFTRKPGIFLGADLNSKDIR-NSMP 358
DB 358 SEKRIQSEYKLGADISYEMWYGFPIIMTYLMTFREGVPGWDSFPEKKGYRTADAV 417
QY 359 IFVVMCMFLPANYAFRLYCTRGGPVPTGP-----TPSLITWKFIQTKVPMGLVFL 411
DB 418 VFLGFLFLIPAK-----KPCF---GKKNDEGNOHSLGTESIITWKDFQKTMPEIVIL 470
QY 412 GGGFALAGSKSGKMAKIGNALIGLKLPLN-SVLLLVVTVAVFLTAPSSNVALNTII 470
DB 471 GGGYALAGSKSGSLSTWIGNOMLSLSPMAVTLACLIVSI-VTEFVSNPATITTF 529
QY 471 PVLAEMLAIEIHPYLILPAGLACSMAFHLPVSTPPNALVAGYANIRTKOMAGIGP 530
DB 530 PILCSLSTLHINPLTYLIPVTMCISFAYMLPVGNPPNAIVFSYGHQIQKMWKAGLGV 589
QY 531 ITITITLFFVFCQTWGLVVPNLNSPPEWAQI 561
DB 590 VIGLVIVMVAINTWGVSLF-HLDTPAWARV 619

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RESULT 5
US-09-556-916-8
; Sequence 8, Application US/09556916
; Patent No. 6548271
; GENERAL INFORMATION:
; APPLICANT: Turner, Alex
; APPLICANT: Zambrowicz, Brian
; APPLICANT: Nehls, Michael
; APPLICANT: Friedrich, Glenn
; APPLICANT: Sands, Arthur T.
; TITLE OF INVENTION: No. 6548271el Human Transporter Proteins
; FILE REFERENCE: 8535-041-999
; CURRENT APPLICATION NUMBER: US/09/556, 916
; CURRENT FILING DATE: 2000-04-21
; NUMBER OF SEQ ID NOS: 32
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 8
; LENGTH: 627
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-556-916-8

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Query Match 29.9%; Score 895.5; DB 2; Length 627;
Best Local Similarity 32.4%; Pred. No. 5.6e-86;
Matches 205; Conservative 122; Mismatches 188; Indels 117; Gaps 15;
QY 24 KGLVFLVPLLC.PVMLNLSGAEPRCMYLLVMAIFWVTEALPLVYTSMPPIVAFPIGCI 83
DB 12 KLLLVCCPLLLPLPLPHSSSEASCAVILVITAVVSEAVPGLAALVPAFLYPPFGV 71
QY 84 MSSDOTRLYFKDTLVFMGIMVALAVEYCNLHKRLALRVIOIGVSGPRRLHGLIMVT 143
DB 72 LRSNEVAEYFKNTLLLVGVICVAAAVEKNLHKRIALRVVMAAGAPGMLLFCMCT 131
QY 144 MFLSMWISNACTAMMCPITIAVIELOAGVCKINHEPOYQIYGKKNKNEDEP----- 198
DB 132 TLLSMWLSNSTSTAMVPIEAVLOEL-----VSAEDE-QLVAGNSNTEABEPISLDV 183
QY 199 ----- 198
DB 184 KNSQPSLELIFVNEESNADLTTLMAENENLVGVSITNPITKANOHQSKQHPSEKQV 243
QY 199 -PYPTK-----ITLCYUIGIAYASSLGGCGTITGTATNLTFKGIYEAPFK 242

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DB 244 LTPSPRKQKLNKRYSHHDQMI CKCLSLSYSATIGLTTIIGTSTSL-----IFLEHFN 299
QY 243 N---STEQMDPFTPEFYSVPSMLVYTLTFVFLQWHEMGL-WRPKSKAEQVORGEGAD 298
DB 300 NQYPAEAVNFGTWLFEFSPISLIMLVSWFMWMLFLGCGNFKETCSLKKKTKRE--Q 357
QY 299 VAKKVIDQRYKDLGPMGSHIEIQWMLFIFMVVMYFTRKPGIFLGADLNSKDIR-NSMP 357
DB 358 LSEKRIQSEYKLGADISYEMWYGFPIIMTYLMTFREGVPGWDSFPEKKGYRTADAV 417
QY 358 TIFVVMCMFLPANYAFRLYCTRGGPVPTGP-----TPSLITWKFIQTKVPMGLVFL 410
DB 418 SVFLGFLFLIPAK-----KPCF---GKKNDEGNOHSLGTESIITWKDFQKTMPEIVIL 470
QY 411 LGGFALAGSKSGKMAKIGNALIGLKLPLN-SVLLLVVTVAVFLTAPSSNVALNTII 469
DB 471 VGGYALAGSKSGSLSTWIGNOMLSLSPMAVTLACLIVSI-VTEFVSNPATITTF 529
QY 470 IFLAEMLAIEIHPYLILPAGLACSMAFHLPVSTPPNALVAGYANIRTKOMAGIGP 529
DB 530 LPLCSLSTLHINPLTYLIPVTMCISFAYMLPVGNPPNAIVFSYGHQIQKMWKAGLGV 589
QY 530 TITITITLFFVFCQTWGLVVPNLNSPPEWAQI 561
DB 590 NVIGLVIVMVAINTWGVSLF-HLDTPAWARV 620

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RESULT 6
US-09-556-916-14
; Sequence 14, Application US/09556916
; Patent No. 6548271
; GENERAL INFORMATION:
; APPLICANT: Turner, Alex
; APPLICANT: Zambrowicz, Brian
; APPLICANT: Nehls, Michael
; APPLICANT: Friedrich, Glenn
; APPLICANT: Sands, Arthur T.
; TITLE OF INVENTION: No. 6548271el Human Transporter Proteins
; FILE REFERENCE: 8535-041-999
; CURRENT APPLICATION NUMBER: US/09/556, 916
; CURRENT FILING DATE: 2000-04-21
; NUMBER OF SEQ ID NOS: 32
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 14
; LENGTH: 626
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-556-916-14

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Query Match 29.8%; Score 891; DB 2; Length 626;
Best Local Similarity 32.3%; Pred. No. 1.7e-87;
Matches 204; Conservative 122; Mismatches 189; Indels 116; Gaps 15;
QY 24 KGLVFLVPLLC.PVMLNLSGAEPRCMYLLVMAIFWVTEALPLVYTSMPPIVAFPIGCI 83
DB 12 KLLLVCCPLLLPLPLPHSSSEASCAVILVITAVVSEAVPGLAALVPAFLYPPFGV 71
QY 84 MSSDOTRLYFKDTLVFMGIMVALAVEYCNLHKRLALRVIOIGVSGPRRLHGLIMVT 143
DB 72 LRSNEVAEYFKNTLLLVGVICVAAAVEKNLHKRIALRVVMAAGAPGMLLFCMCT 131
QY 144 MFLSMWISNACTAMMCPITIAVIELOAGVCKINHEPOYQIYGKKNKNEDEP----- 198
DB 132 TLLSMWLSNSTSTAMVPIEAVLOEL-----VSAEDE-QLVAGNSNTEABEPISLDV 183
QY 199 ----- 198
DB 184 KNSQPSLELIFVNEESNADLTTLMAENENLVGVSITNPITKANOHQSKQHPSEKQV 243
QY 199 -PYPTK-----ITLCYUIGIAYASSLGGCGTITGTATNLTFKGIYEAPFK 243
DB 244 TSPRKQKLNKRYSHHDQMI CKCLSLSYSATIGLTTIIGTSTSL-----IFLEHFN 299

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QY 299 VAKKVIDORVKDGPMSIHIEIQWMLIFPMVWVYFTRKPGIFLGMDLNSKDIR-NSMP 357
DB 358 LSEKRIQIEYEKLGDISYPEWVTGFFILMTVLFETREBGFVPGWDSFPEKKGYRTDATV 417
QY 358 TIFVVMCMPLPANYAPFLRYCTRGGPVPTGP-----TPSLITWKFLOTKVPWGLVEL 410
DB 418 SVFLGFLLELPKAK---KPCF---GKNDGENQHSLSGTETITMKDQKTMPEIIVL 470
QY 411 LGGGFLAAGSKSGKSGMAKLIGNALIGLKVLPN-SVLLVVIIVAVFLTAFFSSNVAIANIT 469
DB 471 VGGGYALASGSKSGSLSTWIGNQMLSTSLPMAVTLTACILVSI-VTEFVSNPATITTF 529
QY 470 IFLVLAEMSLAIEHPIYLIPLPAGLACSMAFHLPVSTPPNALVAGVANTIKMAIAGIGP 529
DB 530 LPTLCISLSETHINPLTYLIPVTMCISFAVMLPVGNPPNAIVFSYGHCOIKOMVAKGLGV 589
QY 530 TITITITLFFCOTWGLVVPNLNSPPEWAOI 561
DB 590 NVIGLVIVWVAINTWGSLEF-HDITYPAMARV 620
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RESULT 9

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US-09-556-916-10
; Sequence 10, Application US/09556916
; Patent No. 6548271
; GENERAL INFORMATION:
; APPLICANT: Turner, Alex
; APPLICANT: Zambrowicz, Brian
; APPLICANT: Nehls, Michael
; APPLICANT: Friedrich, Glenn
; APPLICANT: Sanders, Arthur T.
; TITLE OF INVENTION: No. 6548271el Human Transporter Proteins
; FILE REFERENCE: 8535-041-999
; CURRENT APPLICATION NUMBER: US/09/556,916
; NUMBER OF SEQ ID NOS: 2000-04-21
; SOFTWARE: FASTSEQ for Windows Version 3.0
; SEQ ID NO 10
; LENGTH: 627
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-556-916-10
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Query Match 29.7%; Score 890.5; DB 2; Length 627;
Best Local Similarity 32.4%; Pred. No. 1.9e-87;
Matches 205; Conservative 122; Mismatches 189; Indels 117; Gaps 15;

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QY 24 KGLVFLVPLICLPVWMLNGBAEFRGMVLLVMAIFWVTEALPLVYTSMTPIVAFPIMGJ 83
DB 12 KLLLVCCVPLLLPLPVLHPSSSEASCAYVLIVTAVWVSEAVPLGAALVPAFLYPPFGV 71
QY 84 MSSDQTCRLVFKDQTLVFMFGIMVALAVEYCNLHKRLALRVIOIVGCSPRRLHGLIMVT 143
DB 72 LRSNEVAAEFFKNTITLLVGVICVAALAVEKNMLHKRLALRVLMVMAAGAKPGMLLCFMCCT 131
QY 144 MFLSMWISNACTAMPCPIIQAVLEBLOAGQVCKINHEPOYQIVGSKKNNEDEP----- 198
DB 132 TLISMWLSNSTTAMWPIVEAVLOEL-----VSAEDE-QVAGNSNTEEAEPISLDV 183
QY 199 ----- 198
DB 184 KNSQPSLELIFVNEDRSNADLTTLMHENENLNGVPSITNPITKANOHQKQHPSOEKPQV 243
QY 199 --PYPTK-----ITLCYVLGIVASSLGGCGTIIIGATNLTFKGIYEAFK 242
DB 244 LTPSPRKQKLNRRKYSRHHQMTCKCLSLSTISYATIGLTIIGTSTL-----IFLEHFN 299
QY 243 N---STEQMDPPTFMFYSVPMSLVYTLITFVLQMHFMGL-WRPKSKAEADQVQREGAD 298
DB 300 NQYPAAEVNVNFGTWFLLFSFISLIMLVSWFMWMLFLGCFKFKETCSLSKKKTKRE-Q 357
QY 299 VAKKVIDORVKDGPMSIHIEIQWMLIFPMVWVYFTRKPGIFLGMDLNSKDIR-NSMP 357
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DB 358 LSEKRIQIEYEKLGDISYPEWVTGFFILMTVLFETREBGFVPGWDSFPEKKGYRTDATV 417
QY 358 TIFVVMCMPLPANYAPFLRYCTRGGPVPTGP-----TPSLITWKFLOTKVPWGLVEL 410
DB 418 SVFLGFLLELPKAK---KPCF---GKNDGENQHSLSGTETITMKDQKTMPEIIVL 470
QY 411 LGGGFLAAGSKSGKSGMAKLIGNALIGLKVLPN-SVLLVVIIVAVFLTAFFSSNVAIANIT 469
DB 471 VGGGYALASGSKSGSLSTWIGNQMLSTSLPMAVTLTACILVSI-VTEFVSNPATITTF 529
QY 470 IFLVLAEMSLAIEHPIYLIPLPAGLACSMAFHLPVSTPPNALVAGVANTIKMAIAGIGP 529
DB 530 LPTLCISLSETHINPLTYLIPVTMCISFAVMLPVGNPPNAIVFSYGHCOIKOMVAKGLGV 589
QY 530 TITITITLFFCOTWGLVVPNLNSPPEWAOI 561
DB 590 NVIGLVIVWVAINTWGSLEF-HDITYPAMARV 620
```

RESULT 10

```
US-09-949-016-6840
; Sequence 6840, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; PRIOR FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FASTSEQ for Windows Version 4.0
; SEQ ID NO 6840
; LENGTH: 627
; TYPE: PRT
; ORGANISM: Human
US-09-949-016-6840
```

Query Match 29.7%; Score 889.5; DB 2; Length 627;
Best Local Similarity 32.3%; Pred. No. 2.5e-87;
Matches 204; Conservative 122; Mismatches 189; Indels 117; Gaps 15;

```
QY 24 KGLVFLVPLICLPVWMLNGBAEFRGMVLLVMAIFWVTEALPLVYTSMTPIVAFPIMGJ 83
DB 12 KLLLVCCVPLLLPLPVLHPSSSEASCAYVLIVTAVWVSEAVPLGAALVPAFLYPPFGV 71
QY 84 MSSDQTCRLVFKDQTLVFMFGIMVALAVEYCNLHKRLALRVIOIVGCSPRRLHGLIMVT 143
DB 72 LRSNEVAAEFFKNTITLLVGVICVAALAVEKNMLHKRLALRVLMVMAAGAKPGMLLCFMCCT 131
QY 144 MFLSMWISNACTAMPCPIIQAVLEBLOAGQVCKINHEPOYQIVGSKKNNEDEP----- 198
DB 132 TLISMWLSNSTTAMWPIVEAVLOEL-----VSAEDE-QVAGNSNTEEAEPISLDV 183
QY 199 ----- 198
DB 184 KNSQPSLELIFVNEDRSNADLTTLMHENENLNGVPSITNPITKANOHQKQHPSOEKPQV 243
QY 199 --PYPTK-----ITLCYVLGIVASSLGGCGTIIIGATNLTFKGIYEAFK 242
DB 244 LTPSPRKQKLNRRKYSRHHQMTCKCLSLSTISYATIGLTIIGTSTL-----IFLEHFN 299
QY 243 N---STEQMDPPTFMFYSVPMSLVYTLITFVLQMHFMGL-WRPKSKAEADQVQREGAD 298
DB 300 NQYPAAEVNVNFGTWFLLFSFISLIMLVSWFMWMLFLGCFKFKETCSLSKKKTKRE-Q 357
QY 299 VAKKVIDORVKDGPMSIHIEIQWMLIFPMVWVYFTRKPGIFLGMDLNSKDIR-NSMP 357
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[illegible]

```

RESULT 11
US-09-556-916-16
Sequence 16, Application US/09556916
Patent No. 6548271
GENERAL INFORMATION:
APPLICANT: Turner, Alex
APPLICANT: Zambrowicz, Brian
APPLICANT: Nehls, Michael
APPLICANT: Friedrich, Glenn
APPLICANT: Sander, Arthur T.
TITLE OF INVENTION: No. 6548271el Human Transporter Proteins
FILE REFERENCE: 8535-.041.999
CURRENT APPLICATION NUMBER: US/09/556, 916
CURRENT FILING DATE: 2000-04-21
NUMBER OF SEQ ID NOS: 32
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 16
LENGTH: 626
TYPE: PRT
ORGANISM: Homo sapiens
US-09-556-916-16

```

Query Match 29.6%; Score 886; DB 2; Length 626;

Matches 204; Conservative 121; Mismatches 190; Indels 116; Gaps 15;

24 KGLVFLVPLLCIPVMLLNEGAEFRCMYLLLVMAIFWVTEALPLYVTSMIPIVAFPI 83

12 KLLWCVP¹¹LL¹²PLPV¹³HSSEASCAV¹⁴LV¹⁵TA¹⁶VY¹⁷WSEAV¹⁸PLGA¹⁹ALVPA²⁰FLYP²¹FGV²² 71

84 MSSDOTCRLYEKDTLVMGGIMVALAVEYCNLHKRIALRVIOIVGCSPRRLHFGILIMVT 14

73 I.PSNEVAAEYEKNTT.I.I.VGYI.CVAAAVEKWI.HKRIAT.BMYI.MAGAKPGL.II.CEMCCT 13

114 MEI SMWTSNACTAMCPTIOAVT.FEI.QAOGVCKTNHEBOYOTVGGNKKNEDEP----- 19

123 ETICAT CUMCTAMMDIVENIT OEI --- YSAEDE-OIVAGNSNTEFAEPTSI.DV 18

1933

[illegible]

04 ימרת התחזית דומה לזו של

[illegible]

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[illegible][illegible]

300 ANNALETS DE LA SOCIÉTÉ SCIENTIFIQUE DE LYON. — 1904.

338 SENI VEEI ENGBLIS FEN VIG F F L ENI VNF INEFO V F OMDO F ENUS ANA ON V F

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QY 359 IPVVVMCMPLRANVAATLRCTPRGRGVRPGR-----TPSLIMTKPFIQTKVPMGLVEL 411
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 418 VFFGFLFLPLPAK---KPCF---SKRDGENQHSJSTEPITLTKQBPQKTMPEIYLV 470
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 412 GGGFALAEGRSGKSGMAKLIGNALLIGKVLN-SVLLVLLVAVELTAESSNVAIIII 470
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 471 GGGVALLASGSKSGSLSTWIGNQMLSTSLPPAAVITLLACLIVSI-VYEFVSNPATITIFL 529
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 471 PVLAEMLALIEHPVLYLLIPAGLACSMAPHLEPVSTPPAALVAGYANITTKDMALAGIGPT 530
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 530 PRLCSLEQHIAPRLTYLLIPVMTCISFVAVMLPVGGNPPAIVFSYGHCOIKDMVYAGLVN 589
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 531 IITITILLFVPCQTWGLVUVPINLSRPEAAQI 561
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 590 VIGGLVIMVAINTMGVSLF-HLDTPPAMARV 619
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

```

```

RESULT 12
US-09-556-916-4
; Sequence 4, Application US/09556916
; Patent No. 6548271
; GENERAL INFORMATION:
; APPLICANT: Turner, Alex
; APPLICANT: Zambrowicz, Brian
; APPLICANT: Nehls, Michael
; APPLICANT: Friedrich, Glenn
; APPLICANT: Sands, Arthur T.
; TITLE OF INVENTION: No. 6548271e1 Human Transporter Proteins
; FILE REFERENCE: 8535-.041-999
; CURRENT APPLICATION NUMBER: US/09/556.916
; CURRENT FILING DATE: 2000-04-21
; NUMBER OF SEQ ID NOS: 32
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 4
; LENGTH: 627
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-556-916-4

```

Query Match 29.6%; Score 885.5; DB 2; Length 627;

Matched Local Similarity 32.3%; Area: 0.00-0.77;
 Matches 204; Conservative 121; Mismatches 190; Indels 117; Gaps 15

24 KGLVVFVPLCLPVMLLNEGAEFRCMYLLVMAIFWTEALPLYVTSMIPIVAFPI 83

12 KLLVVCYPLLLPLEVTHPSSEASCAYLIVTAVYVWSEAVPLGAALVPFLYPPFGV 71

84 MSNDOTCRLYEKDTI.VMEMGIMVAI.AVEYCN.IHKRLALBVIOTVGCSPBRLHFGILMVT 143

72 T P S N E V A A E Y P K N T T I . I . V G V I C V A A V E K N I . H K R I A L B M Y L M A G A K P G M I L L C E M C C T 131

144 MEI SMWTGNNACTAMMCBITDAVT.EEIQAAGVCRTNHEBOYOTVGGNKKNEDEP----- 198

[illegible]

100

[illegible]

עצרת ישיבה

[illegible]

1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

[illegible]

CONCLUSIONS

239 VAKKAVI DUNINDU OFMSIHELY VMTLUF TFMV VMTI TANKSTI CONNADENINCONIN ANONIN 001

358 LSEBKIQEIEIKLGDISIFENVIGFFIIMIVMFIKKEGVFQWDSFEKUCIKADNA' 327

358 IIFVVVCMLEFANIAFLKILKGGVPIGF-----IFSLIMNFYQINVENQVLE 410

```
Db      418 SVFLGFLLELPK-----KPCF---OKNDGENOESLSTGEPITTTKDKQKMPKPIVIL 470
      411 LGGGFALAEKSGKSGMAKLIIGNALIGLVLPN-SVLLVVIYVAVELFASSNVAIAINTI 469
      471 VGGGVYALAGSGSSGSLSTWIGNOMLSLSLPPAAVTLIACILVSI-VTEFVSAPATITTF 529
      470 IPVLAEMSLAIEIHPYLLIPAGLACSMAFHLEFVSPPNALVAGYANIRTKOMALIGIFP 529
      530 LPIFLGSLSETOHINPLIYTLIPVTMCISFAVMLPVGHPNALVPSYGHCOIKVMKAGLGV 589
      530 TITTTITLTPVPCOTMGLVVPNLNSPPEMAOI 561
      590 NVIGLVIYVVAIVNTWGSLEF-HLDTYPPAMARV 620
      Db
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RESULT 13

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US-09-949-016-9977
; Sequence 9977, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; PRIOR FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 9977
; LENGTH: 601
; TYPE: PRF
; ORGANISM: Human
US-09-949-016-9977
```

```
Query Match      29.4%; Score 879.5; DB 2; Length 601;
Best Local Similarity 34.4%; Pred. No. 2.9e-86;
Matches 207; Conservative 124; Mismatches 190; Indels 81; Gaps 16;

      27 VVFLV-PLCLPWLNLNEGAFRCMYLLVMAIFWVTEALPLYTSMIPYAFPIGIMS 85
      22 VVFTVVLVLPPLPLVLTATKEA--CAVTLFVAVTWTLEALPLSVTALLPSLMDPFGIMP 79
      86 SDQTCRLYFPCDTLVMPFGIMVVALAVECNLHKRLALRVIOIVGCSPPRLHFGILIMTF 145
      80 SKKVASAYFPCDTHLLGVICLATSIEKNLHKRIALKMVMGVNPAWLTIGFMSSTAF 139
      146 LSMWISNACTAMMCPPIIOAVLE-----ELQAGVCYKINHEPOY-----QIVGNKN 193
      140 LSMWLSMTSTAAVMPILAAVAVQIINAAEVEATQMTYFNGSTNHGLEIDESVNGHEIN 199
      194 NEDEPPVPT-----KIT-LCYVGLIAYASS 217
      200 ERKERTKVPVPGYNDTGKISSKVELKNSGMRTRYTKGHTKLTCLC---IAYSST 255
      218 LGGGCTIIGATNTLTFKGIYAEARFNSTBOMDPTFMFYSVSMVNTLTTFVLOHFM 277
      256 IGGTLTTGTSTNLIFAEYFNTKRPD-CRCLNFGSMFFSPALLIILLISWILQNLFL 314
      278 G-----LWR-PKSKAEQEVORGRGADVAKKVIDQRYKDLGMSIHEIQVILFIWVVM 331
      315 GFNFKEMKCGKTKTVQO-----KACAEVIKQEVOKGPIRVOEIVTLVLFIMALL 366
      332 YFTKPGIPLGADLANSKD--IRNSMTTIFVVMCMFLPANYAFARLCTRGCGVPYRGP 389
      367 WFSRDPGFVPGMSALFSEYRPGFATDSTVALILGLIFLIPAK--TLTKTPTGTGEIVADY 424
      Db
```

```
      390 TPSLITWKEIQTQKPMGLVFLGFGFALAEKSGKSGMAKLIIGNALIGLVLPNSVLLVV 449
      425 SP-LITWKEFOQPMFMDIALIVGGGFALADGCEESGLSKWIKNKLSPGLSLPAMLIILIS 483
      450 IIVAVFLFASSNVAIAINTIIVLAEMSLAIEIHPYLLIPAGLACSMAFHLPVSTPPNA 509
      484 SLMTSLTEVANSNPATITTLFLPLSLPLAEAIHVNPYIILIPSTLCTSFALLPVANPNA 543
      510 LVAGYANIRTKOMALAGIPTITITITLTPFCOTMGLVVPNLNSPPEMAOIVAAALGN 569
      544 IVFSGYGLKVIDMVXAGLVGINVAGVAVMLGICTW-IVEMFDLYTPSN-----APAMSN 597
      570 KT 571
      598 ET 599
      Db
```

RESULT 14

```
US-09-556-916-24
; Sequence 24, Application US/09556916
; Patent No. 6548271
; GENERAL INFORMATION:
; APPLICANT: Turner, Alex
; APPLICANT: Zambrowicz, Brian
; APPLICANT: Nehls, Michael
; APPLICANT: Friedrich, Glenn
; TITLE OF INVENTION: No. 6548271el Human Transporter Proteins
; FILE REFERENCE: 8535-041-999
; CURRENT APPLICATION NUMBER: US/09/556,916
; CURRENT FILING DATE: 2000-04-21
; NUMBER OF SEQ ID NOS: 32
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 24
; LENGTH: 580
; TYPE: PRF
; ORGANISM: Homo sapiens
US-09-556-916-24
```

```
Query Match      25.4%; Score 760; DB 2; Length 580;
Best Local Similarity 29.6%; Pred. No. 2.6e-73;
Matches 187; Conservative 114; Mismatches 168; Indels 162; Gaps 17;

      24 KGLVFLVPLCLPWLNLNEGAFRCMYLLVMAIFWVTEALPLYTSMIPYAFPIGIMI 83
      12 KLLVVCVPLLLPLPLTPSSASCAVYLIVAVVWSAVPLGAALVPALYPPFGV 71
      84 MSQDCRLYFPCDTLVMPFGIMVVALAVECNLHKRLALRVIOIVGCSPPRLHFGILIMTF 143
      72 LRNEVAAEYFNKTTLLLVGVICVAAAVEKNLHKRIALRMVMAAGAKPGMLLCPFCCT 131
      144 MFSMWSISNACTAMMCPPIIOAVLEIQAQGVCKINHEPOYQIVGNKNNEDEP----- 198
      132 TLISMWLSMTSTTAMWPIEAVLQEL-----VSAEDE-QLVAGNSNTEEAEPISLDV 183
      199 ----- 198
      184 KNSQPSLELIFVNEESNADLTTLMHENLNGVPSITNPITKANQHQKQHPQEKQVL 243
      199 -PYPTK-----ITLCYVGLIAYASSLGGCTIIGATNTLTFKGIYAEARFN 243
      244 TFSRKKQKMRKYRSHHDQMICKLSISYSATIGLTTIIGTSTL-----IFLEHFN 299
      244 ---STBQMDPTFMFYSVSPMLVYTLTFVLOHFMGL-WRPKSKAEQEVORGRGADV 299
      300 QYPAEYVNVNGTWTLEFPISLIMLVSMWMEHMLFIGNPKETCSLKKKTKR--QL 357
      300 AKKVIDQRYKDLGMSIHEIQVILFIWVVMYFTKPGIPLGADLANSKDR-NSMPT 358
      358 SEKRIQEVKELGDISYPMWGTGFFFLIMLVLFTRBPFGVPGWDSFFEKGYRTDAYS 417
      359 IFVVMCMFLPANYAFARLCTRGCGVPYRGP-----TSLITWKEIQTQKPMGLVFL 411
      411
```



```
Db 418 VRLGFLFLIPAK---KPCF---GKNDGENOESLGTESIITWKDFOKTWPWEIVILV 470
Qy 412 GGGFALAEBSKSGSMATLIGNALIGKVLPN-SVLLLVILVAVFLAFSSNVAIANII 470
Db 471 GGGYALASGSKSGSLSTWIGNOMLSLSPMPAVTLIACILVSI-VTEFVSNPATITIFL 529
Qy 471 PVLAEMSLAIEIHPYLIIIPAGLACSMAFHLPVSTPPNALVAGYANIRTKDMALIGIGPT 530
Db 530 PTL-----CS-----LVKAGLGVN 543
Qy 531 TITITLFFVFCQTGVLVVPNLNSFPPEMAOI 561
Db 544 VIGLIVMVAINTWGSIF-HLDTYPAMARV 573
```

```
RESULT 15
US-09-556-916-12
/ Sequence 12, Application US/09556916
/ Patent No. 6548271
/ GENERAL INFORMATION:
/ APPLICANT: Turner, Alex
/ APPLICANT: Zambrowicz, Brian
/ APPLICANT: Nehls, Michael
/ APPLICANT: Friedrich, Glenn
/ APPLICANT: Sands, Arthur T.
/ TITLE OF INVENTION: No. 6548271e1 Human Transporter Proteins
/ FILE REFERENCE: 8535-041-999
/ CURRENT APPLICATION NUMBER: US/09/556,916
/ CURRENT FILING DATE: 2000-04-21
/ NUMBER OF SEQ ID NOS: 32
/ SOFTWARE: FastSeq for Windows Version 3.0
/ SEQ ID NO 12
/ LENGTH: 581
/ TYPE: PRT
/ ORGANISM: Homo sapiens
US-09-556-916-12
```

```
Query Match 25.4%; Score 759.5; DB 2; Length 581;
Best Local Similarity 29.6%; Pred. No. 3e-73;
Matches 187; Conservative 114; Mismatches 168; Indels 163; Gaps 17;
```

```
Qy 24 KGLVPLVPLLCIPVNLINBGAERFCMYLLVVAIFMVTEALPLYVTSMIPVAPPIGI 63
Db 12 KLLVVCVPLLLPLVLPSSASCAYVLTVAVWSEAVPLGAALVPAFLYPPFGV 71
Qy 84 MSSDOTCRLYFKDTLVFMWGIWALAVEYCNLHKRLALRVIOIVGCSPPRLHFGILVY 143
Db 72 LNSNEVAABYFKTITLLVGVICVAAAVEKNLHKRIALRMVLMAGAKGMILLCFMCT 131
Qy 144 MFLSMWISNAACTAMCPITIOAVLEELQAGVCKINHEPOYQIVGNNKKNDEP----- 198
Db 132 TLISMWLSNSTSTAMPIVEAVLOEL-----VSAEDE-QLVAGNSNTEEAEPISLDV 183
Qy 199 ----- 198
Db 184 KNSQPSLELIFVNEGRSNDLTTLMENENLVPSITNPITKANOHQKKHPSQEKPOV 243
Qy 199 --PYPTK-----ITLCYVLGIAYASLGGCGTIIIGTATNLTFGKIYEAPRK 242
Db 244 LTPSPRKQKLNRRYRSHHQMICKLSLSISYATIGGLTIIIGTSTSL-----IFLEHFN 299
Qy 243 N---STEQNDPPTFMFYSVPSMLVYTLTLFVFLQHFPMGI-WRPKSKAEQEVQREGAD 298
Db 300 NQYPAAEVNVFGTWFPSFISLIMLVSVFMWMLFLGCFKETSLSKKKTKE--Q 357
Qy 299 VAKKVVDQYKDLGPMWSIHQIMLIFEMVVMVPTPKPGIFLGWADLLNSKDIR-NSMP 357
Db 358 LSEKRIQEEYKGDISYPMWTFGPFILMTVLMFTREBGFVPGWDSFPEKKGYRTDAYV 417
Qy 358 TIFVVVMCFMLPANYAFLARYCTRGGFVPTGP-----TPSLITWKFIOTKVPMGI,VFL 410
Db 418 SVLGLFLFLIPAK---KPCF---GKNDGENOESLGTESIITWKDFOKTWPWEIVIL 470
```

```
Qy 411 LGGFALAEBSKSGSMATLIGNALIGKVLPN-SVLLLVILVAVFLAFSSNVAIANII 469
Db 471 VGGYALASGSKSGSLSTWIGNOMLSLSPMPAVTLIACILVSI-VTEFVSNPATITIF 529
Qy 470 IPVLAEMSLAIEIHPYLIIIPAGLACSMAFHLPVSTPPNALVAGYANIRTKDMALIGIGP 529
Db 530 LPTL-----CS-----LVKAGLGVN 543
Qy 530 TITITLFFVFCQTGVLVVPNLNSFPPEMAOI 561
Db 544 NVIGLIVMVAINTWGSIF-HLDTYPAMARV 574
```

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Search completed: May 5, 2006, 14:33:59
Job time : 26.1524 secs
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GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioceleration Ltd.

OM protein - protein search, using sw model

Run on: May 5, 2006, 14:31:21 ; Search time 23.7302 Seconds
(without alignments)
1958.002 Million cell updates/sec

Title: US-10-017-479a-3
Perfect score: 2897
Sequence: 1 MAFBGRKFLVGRRCIFHM.....FPESKSPDMAKEIKNQTKI 562

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 572060 seqs, 82675679 residues

Total number of hits satisfying chosen parameters: 572060

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued Patente AA:*
1: /cgn2_6/ptodata/1/1aa/5 COMB.pep:*
2: /cgn2_6/ptodata/1/1aa/6 COMB.pep:*
3: /cgn2_6/ptodata/1/1aa/H COMB.pep:*
4: /cgn2_6/ptodata/1/1aa/PTUS COMB.pep:*
5: /cgn2_6/ptodata/1/1aa/RB COMB.pep:*
6: /cgn2_6/ptodata/1/1aa/backfile1.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	920	31.8	180	US-09-270-767-42669	Sequence 42669, A
2	844	29.1	599	US-09-949-016-9866	Sequence 9866, Ap
3	793	27.4	368	US-09-270-767-42029	Sequence 42029, A
4	743	25.6	626	US-09-556-916-20	Sequence 20, Appl
5	742.5	25.6	627	US-09-556-916-8	Sequence 8, Appl
6	741	25.6	626	US-09-556-916-14	Sequence 14, Appl
7	740.5	25.6	627	US-09-556-916-2	Sequence 2, Appl
8	738.5	25.5	627	US-09-949-016-6840	Sequence 6840, Ap
9	737	25.4	626	US-09-556-916-22	Sequence 22, Appl
10	736.5	25.4	627	US-09-556-916-10	Sequence 10, Appl
11	735	25.4	626	US-09-556-916-16	Sequence 16, Appl
12	734.5	25.4	627	US-09-556-916-4	Sequence 4, Appl
13	696	24.0	601	US-09-949-016-9977	Sequence 9977, Ap
14	661	22.8	132	US-09-270-767-57987	Sequence 57987, A
15	624	21.5	580	US-09-556-916-24	Sequence 24, Appl
16	623.5	21.5	581	US-09-556-916-12	Sequence 12, Appl
17	622	21.5	580	US-09-556-916-18	Sequence 18, Appl
18	621.5	21.5	581	US-09-556-916-6	Sequence 6, Appl
19	611	21.1	230	US-09-270-767-43713	Sequence 43713, A
20	582.5	20.1	527	US-09-949-016-8161	Sequence 8161, Ap
21	544	18.8	567	US-09-602-787A-516	Sequence 516, App
22	527	18.2	194	US-09-270-767-59102	Sequence 59102, A
23	453.5	15.7	470	US-09-543-681A-5952	Sequence 5952, A
24	427.5	14.8	169	US-09-270-767-57286	Sequence 57286, A
25	351	12.1	233	US-09-489-847-176	Sequence 176, App
26	327.5	11.3	335	US-09-602-787A-518	Sequence 518, App
27	283.5	9.8	524	US-09-134-001C-5457	Sequence 5457, Ap

28	244	8.4	421	2	US-09-248-796A-20749	Sequence 20749, A
29	196	6.8	624	2	US-09-543-681A-4343	Sequence 4343, Ap
30	182	6.3	614	2	US-09-489-039A-12605	Sequence 12605, A
31	179	6.2	302	2	US-09-540-10445	Sequence 10445, A
32	164	5.7	430	2	US-09-134-001C-2981	Sequence 2981, Ap
33	162.5	5.6	429	2	US-08-311-731A-287	Sequence 287, App
34	157	5.4	437	2	US-09-543-681A-6984	Sequence 6984, Ap
35	151.5	5.2	694	2	US-09-252-921A-22637	Sequence 22637, A
36	146.5	5.1	443	2	US-09-602-787A-532	Sequence 532, App
37	145.5	5.0	436	2	US-09-489-039A-13843	Sequence 13843, A
38	145	5.0	547	2	US-09-583-110-4729	Sequence 4729, Ap
39	145	5.0	440	2	US-09-107-433-5201	Sequence 5201, Ap
40	144.5	5.0	548	2	US-09-902-540-11870	Sequence 11870, A
41	140	4.8	449	2	US-09-328-352-7512	Sequence 7512, Ap
42	139.5	4.8	526	2	US-09-902-540-13547	Sequence 13547, A
43	132	4.6	595	2	US-09-543-681A-5886	Sequence 5886, Ap
44	132	4.6	751	2	US-09-934-868-58	Sequence 58, Appl
45	132	4.6	751	2	US-10-701-200-58	Sequence 58, Appl

ALIGNMENTS

RESULT 1
US-09-270-767-42669
; Sequence 42669, Application US/09270767
; Patent No. 6703491
; GENERAL INFORMATION:
; APPLICANT: Homburger et al.
; TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
; FILE REFERENCE: File Reference: 7326-094
; CURRENT APPLICATION NUMBER: US/09/270,767
; CURRENT FILING DATE: 1999-03-17
; NUMBER OF SEQ ID NOS: 62517
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 42669
; LENGTH: 180
; TYPE: PRT
; ORGANISM: Drosophila melanogaster
US-09-270-767-42669

Query Match 31.8% Score 920; DB 2; Length 180;
Best Local Similarity 100.0% Pred. No. 8.6e-87;
Matches 180; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 383 AIDALISMEYVLNIPWGLIFLLGGFALAVASREGLNIMISKAOVLIGLPNIYQSI 442
DB 1 AIDALISMEYVLNIPWGLIFLLGGFALAVASREGLNIMISKAOVLIGLPNIYQSI 60
QY 443 TFLVLANFEFAFNANVVANIVLPILCEMSIALBLPILPLPACLGISWYFLPVSTPPN 502
DB 61 TFLVLANFEFAFNANVVANIVLPILCEMSIALBLPILPLPACLGISWYFLPVSTPPN 120
QY 503 AITVQVNHITKYPACGIVPTIIGISVALVNTNTWGLIFPESKSPDMAKEIKNQTKI 562
DB 121 AITVQVNHITKYPACGIVPTIIGISVALVNTNTWGLIFPESKSPDMAKEIKNQTKI 180
RESULT 2
US-09-949-016-9866
; Sequence 9866, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: C0001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03

PRIOR APPLICATION NUMBER: 60/231,498
PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 207012
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 9866
LENGTH: 599
TYPE: PRT
ORGANISM: Human
US-09-949-016-9866

Query Match 29.1%; Score 844; DB 2; Length 599;
Best Local Similarity 33.9%; Pred. No. 3,7e-78;

Matches 200; Conservative 111; Mismatches 199; Indels 80; Gaps 14;

20 WRGKASII---IPILITPLIYGFQTDMAEFKCLMLIVTMALITETLPITYTALFPLV 76
16 MAYRSYLIVFVPLILPLIL---VPSKAYCAVAIIIMALFWCTEALPLATLALFPLI 72
77 FCPILGLVNASIYCKQYFTDTIVFLGLIYALGIEYSNLTFRIALRVIRIVGSPRLF 136
73 LFPWMGIVDASEVAVEYLKDSNLPFGGLVLAIVHEMNLKRIALRVILIVGRAPLI 132
137 VGLMSTVFMGLMISNSAGTAMCPYKALVNLDTNKIFPVYMTQEEPEVEEG----- 190
133 LGMVLVTAFLSMWISMTATSAWVPIAHAVLDL-----HSSQASSVEEGSNPTF 184
191 --EPPHPSK-----ITVAPYAG-----IYASSIGGLTL 218
185 ELQEPSPQEVTKLDNGOALPVTSSASBGRALHOKRLHLTQOMSLCVCYSASIGIATL 244
219 IGTGLTVFPGITERTPEPTSTVEITFANFMFVSIPLMVLVNTVLIAPL---ITMGL- 274
245 TGTAPLVLVLOGQNSLPFGQNGVNVNFRASWSPAFPMVI-----LILLAMLMQILFLGN 300
275 FRPNSKTGKIIAENATNRKLMEDVLFQRHIDLPMSCHETQMAIAFAMIVLITRKPGF 334
301 FRKNFGIGERKQE---QQQAAYCVIOTEHRLLGPMTEAEKASISILFVILVLMFTREPGF 357
335 VPMWSDLI-----NRKTVGSASGLSPVLLIPLPQYTFKXCCG-----KGPPTAQAI 384
358 FLQMGMLAFPNKAGESVSDGTVAIFGIIMFTIPSKFP-----GLTODPENPGKAKAP 411
385 DALISVEYLRNIPMGILFLPGGFALAVASRETGLNIMISKAMQVLIIGLPNTVOSTP 444
412 LGLDDKKTVMQKPMNIVLLGGYALAKSERSGSEWLGKLTPLQSPAPADAILIS 471
445 VLANFSAFNAVNVANIVLPIICENSLALELHPILITLPACIGISNVYLPYSTPNAI 504
472 LTVATFECTSNVATTTIFLPIIASMAQAIChPLVYMLPCTLATSLAFMLPVATPPNAI 531
505 VTQYAHKTKYFACCGIVPTIIGISVALVNTNTMGLIIFPESKSPDPMK 554
532 VPSFGDLKVIDMARAGFLNIIGVLIITALAINSGILF-SLHSFSPMAQ 580

RESULT 3

US-09-270-767-42029

Sequence 42029, Application US/09270767

Patent No. 6703491

GENERAL INFORMATION:

APPLICANT: Hombrugger et al.

TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster

FILE REFERENCE: File Reference: 7326-094

CURRENT APPLICATION NUMBER: US/09/270,767

CURRENT FILING DATE: 1999-03-17

NUMBER OF SEQ ID NOS: 62517

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 42029

LENGTH: 368

TYPE: PRT

ORGANISM: Drosophila melanogaster

FEATURE:

OTHER INFORMATION: Xaa means any amino acid

US-09-270-767-42029

Query Match 27.4%; Score 793; DB 2; Length 368;

Best Local Similarity 43.6%; Pred. No. 3.3e-73; Indels 16; Gaps 6;

Matches 154; Conservative 71; Mismatches 112; Indels 16; Gaps 6;

3 EPEQRKFLVGRCCIF---HMRKASIIIPITPLIYGFQTDMAEFKCLMLIVTMAL 59
17 EIGEQPQPPV-KCSNFFANHKGLVFLVPLLCPLVML---NEGAEFRQVLLVMAIF 72
60 WITETPLIYVTAFLPVLVCPILGLVNASIVCKQYFTDTIVFLGLIYALGIEYSNLTFR 119
73 WTEALPLVYVSMITIVAFPIWIGMSDQOTRLVFKDILVFMGIGIYVLAIVEYCNLHKR 132
120 IALRVIRIVGSPRLFLVGLMSVSTFMGLMISNSAGTAMCPYKALVNLDTNKIFPVY 179
133 LALRVIXXX 192
180 MTQEEEPV-----EGRPPHPSKITVAFYAGIAYASSIGGLTILGTNLVFRGIYTE 233
193 HEPQYQIVGNKKNNEDEPPYTKITLCYLGIAVASSIGCGGTITGTATNLTFKGIYEA 252
234 RPTSTVEITFANFMFVSIPLMVLVNTVLIAPLIT-MGLFRPNSKTGKIIAENATNR 292
253 RPKNSTEQWDFTEFMFVSPSMLV---YTLITFVLQHMFMGLMRKSKDAQSVQGRGGA 310
293 KLMEDVLRQRHIDLPMSCHETQMAIAFAMIVLITRKPGFVPMQSDLINRK 345
311 DVAKVYIDQRYKDLQPMGSHIETQWILFIMVVMVFTKRPGLFGMADLNSK 363

RESULT 4

US-09-556-916-20

Sequence 20, Application US/09556916

Patent No. 6548271

GENERAL INFORMATION:

APPLICANT: Turner, Alex

APPLICANT: Zambrowicz, Brian

APPLICANT: Nehls, Michael

APPLICANT: Friedrich, Glenn

APPLICANT: Sands, Arthur T.

TITLE OF INVENTION: No. 6548271el Human Transporter Proteins

FILE REFERENCE: 8535-041-999

CURRENT APPLICATION NUMBER: US/09/556,916

CURRENT FILING DATE: 2000-04-21

NUMBER OF SEQ ID NOS: 32

SOFTWARE: FastSeq for Windows Version 3.0

SEQ ID NO 20

LENGTH: 626

TYPE: PRT

ORGANISM: Homo sapiens

US-09-556-916-20

Query Match 25.6%; Score 743; DB 2; Length 626;

Best Local Similarity 28.2%; Pred. No. 1.1e-67; Indels 100; Gaps 14;

Matches 175; Conservative 124; Mismatches 222; Indels 100; Gaps 14;

26 IIPILITPLIYGFQTDMAEFKCLMLIVTMALITETLPITYTALFPLVCPILGLVN 85
17 VCPILITPLIPLVL---HPSSEASCAVILIVTAVVWSEAVPLGAALVAPFLVPPFGVLR 73
86 ASIVCKQYFTDTIVFLGLIYALGIEYSNLTFRIALRVIRIVGSPRLFLVGLMSVSTF 145
74 SNEVALEYKNTLLVGVICVAAAEKNNLHRIALRVNLAAGAKFGMLLCCFMCTTL 133
146 MGLMISNSAGTAMCPYKALVNLDTNKIFPVYMTQEEEPV----- 187
134 LSWMLNSTITAMVMEIVAEVIOELVASDEQVLVAGNSVTEEKEPISLVKNSQPELELI 193
188 -----EGRPPHPSK----- 197
194 FVNEBSNADLTTLMHENINIGVPSITNPITKANOHGKQHPSQEKPOVLTSPRKQKLN 253

QY 198 -----ITVAFVAGIAYASSIGGLTIGTGNLVFRGITYTERFPSTVEITPANF 247
 DB 254 RKYRSHHDQMI CKCLSLSSISYSATIGLTIIGTSTSLIFLEHNNQYPAAEV-VNFGTW 312
 QY 248 MYRSTPLMAYVNTVLTIVFLITMGLFRPNRK-TGKI IAEANTNR-KLMEDEVLRORHI 305
 DB 313 WFLFSFPISLI-----MLVSMFPMHMLFLGCFKETSLSKKKTKRELSKRIQOEYRK 368
 QY 306 LGPMSCHIEOMAIAFAFMI VLLITRKPGFVPGWSDLINRKVGSAGLS-FIVLLIFALP 364
 DB 369 LGDISFBNVGTGFFILMTVLMFTREBGFVPGWDSFEKKGYRTDATVSVFLGFLFLP 428
 QY 365 TOYTFPKYCCGK--GPFTRQAI--DALISWEYLRNIPWGLLFLGCGFALAVARENG 419
 DB 429 AK----KPCFGKNDGENQSHSISTGESIITWKDFOKTPMEIIVILVGGYALASGSKSSG 484
 QY 420 LNMISKAMQVILGIPNIVQSIITPVLANFSAFNANVVANVILPILCEMSLAELEHP 479
 DB 485 LSTWIGNOMLSLSPMAVTLTACILVSVTEFVSNPATITTFPLILCSLSTLHINP 544
 QY 480 ILTLPAICGISWVYFLPVSTPPNAIVTQYAHIKTKYFACCGIVPTIIGISVALVNTNTWG 539
 DB 545 YTLIPVTCISPAVMLPVGNPNALIVFSYGHQCIKDWVKAGLVNVLGIVVVAINTWG 604
 QY 540 LIIFPESKSPDMAKEIKNOT 560
 DB 605 VSLF-HLDTPAMAR-VSNIT 623

RESULT 5
 US-09-556-916-8
 ; Sequence 8, Application US/09556916
 ; Patent No. 6548271
 ; GENERAL INFORMATION:
 ; APPLICANT: Turner, Alex
 ; APPLICANT: Zambrowicz, Brian
 ; APPLICANT: Nehls, Michael
 ; APPLICANT: Friedrich, Glenn
 ; APPLICANT: Sands, Arthur T.
 ; TITLE OF INVENTION: No. 6548271el Human Transporter Proteins
 ; FILE REFERENCE: 8535-041-999
 ; CURRENT APPLICATION NUMBER: US/09/556, 916
 ; CURRENT FILING DATE: 2000-04-21
 ; NUMBER OF SEQ ID NOS: 32
 ; SOFTWARE: FaastSeq for Windows Version 3.0
 ; SEQ ID NO 8
 ; LENGTH: 627
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-09-556-916-8

Query Match 25.6%; Score 742.5; DB 2; Length 627;
 Best Local Similarity 28.1%; Pred. No. 1.2e-67;
 Matches 175; Conservative 124; Mismatches 222; Indels 101; Gaps 14;
 QY 26 IIPPLTPIIYGFOTDMAEFKCLMLVTMALMITETLPIYVTALEPVLFCPLGLVN 85
 DB 17 VCPVLLPLPVL---HSSBASCAYVLTAVVWSEAVPLGAALVPAFLVFPFGLR 73
 QY 86 ASIYCKOYFTDTIVFGLGILVALGIEYSNLTIRIALRVIRIYGSGPRRLFVGLMSVTF 145
 DB 74 SNEVAABYFKQTTLLVGVICVAAAVEKMLHKRIALRMVLMAGAKPGMLLCEMCCTTL 133
 QY 146 MGLMISNAGTAMMCPYKALVNL-----DTNKIFPVYMQOEPRV----- 187
 DB 134 LSMWLSNTSTTAMVPIVEAVLDELVSADBDQVAGNSNTEAEFISLDVKNQSPSLELI 193
 QY 188 -----EEGEPHPK----- 197
 DB 194 FVNEBSNADLTTLAHNENLNGVPSITNPITANHQKQKHPSQEKQOVLTSPRKOXL 253
 QY 198 -----ITVAFVAGIAYASSIGGLTIGTGNLVFRGIYTERFPSTVEITPAN 246

DB 254 NRKYSHDQMI CKCLSLSSISYSATIGLTIIGTSTSLIFLEHNNQYPAAEV-VNFGT 312
 QY 247 EHFYSIPLMAYVNTVLTIVFLITMGLFRPNRK-TGKI IAEANTNR-KLMEDEVLRORHI 304
 DB 313 WFLFSFPISLI-----MLVSMFPMHMLFLGCFKETSLSKKKTKRELSKRIQOEYRK 368
 QY 305 LGPMSCHIEOMAIAFAFMI VLLITRKPGFVPGWSDLINRKVGSAGLS-FIVLLIFALP 363
 DB 369 LGDISFBNVGTGFFILMTVLMFTREBGFVPGWDSFEKKGYRTDATVSVFLGFLFLP 428
 QY 364 TOYTFPKYCCGK--GPFTRQAI--DALISWEYLRNIPWGLLFLGCGFALAVARENG 418
 DB 429 AK----KPCFGKNDGENQSHSISTGESIITWKDFOKTPMEIIVILVGGYALASGSKSS 484
 QY 419 GNMISKAMQVILGIPNIVQSIITPVLANFSAFNANVVANVILPILCEMSLAELEHP 478
 DB 485 GLSTWIGNOMLSLSPMAVTLTACILVSVTEFVSNPATITTFPLILCSLSTLHINP 544
 QY 479 ILTLPAICGISWVYFLPVSTPPNAIVTQYAHIKTKYFACCGIVPTIIGISVALVNTNTWG 538
 DB 545 LTLIPVTCISPAVMLPVGNPNALIVFSYGHQCIKDWVKAGLVNVLGIVVVAINTWG 604
 QY 539 GLIIFPESKSPDMAKEIKNOT 560
 DB 605 GVSLE-HLDTPAMAR-VSNIT 624

RESULT 6
 US-09-556-916-14
 ; Sequence 14, Application US/09556916
 ; Patent No. 6548271
 ; GENERAL INFORMATION:
 ; APPLICANT: Turner, Alex
 ; APPLICANT: Zambrowicz, Brian
 ; APPLICANT: Nehls, Michael
 ; APPLICANT: Friedrich, Glenn
 ; APPLICANT: Sands, Arthur T.
 ; TITLE OF INVENTION: No. 6548271el Human Transporter Proteins
 ; FILE REFERENCE: 8535-041-999
 ; CURRENT APPLICATION NUMBER: US/09/556, 916
 ; CURRENT FILING DATE: 2000-04-21
 ; NUMBER OF SEQ ID NOS: 32
 ; SOFTWARE: FaastSeq for Windows Version 3.0
 ; SEQ ID NO 14
 ; LENGTH: 626
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-09-556-916-14

Query Match 25.6%; Score 741; DB 2; Length 626;
 Best Local Similarity 28.2%; Pred. No. 1.7e-67;
 Matches 175; Conservative 123; Mismatches 223; Indels 100; Gaps 14;
 QY 26 IIPPLTPIIYGFOTDMAEFKCLMLVTMALMITETLPIYVTALEPVLFCPLGLVN 85
 DB 17 VCPVLLPLPVL---HPSBASCAYVLTAVVWSEAVPLGAALVPAFLVFPFGLR 73
 QY 86 ASIYCKOYFTDTIVFGLGILVALGIEYSNLTIRIALRVIRIYGSGPRRLFVGLMSVTF 145
 DB 74 SNEVAABYFKQTTLLVGVICVAAAVEKMLHKRIALRMVLMAGAKPGMLLCEMCCTTL 133
 QY 146 MGLMISNAGTAMMCPYKALVNL-----DTNKIFPVYMQOEPRV----- 187
 DB 134 LSMWLSNTSTTAMVPIVEAVLDELVSADBDQVAGNSNTEAEFISLDVKNQSPSLELI 193
 QY 188 -----EEGEPHPK----- 197
 DB 194 FVNEBSNADLTTLAHNENLNGVPSITNPITANHQKQKHPSQEKQOVLTSPRKOXL 253
 QY 198 -----ITVAFVAGIAYASSIGGLTIGTGNLVFRGIYTERFPSTVEITPAN 247
 DB 254 RKYRSHHDQMI CKCLSLSSISYSATIGLTIIGTSTSLIFLEHNNQYPAAEV-VNFGTW 312

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QY 248 MFSIFPMVAVNTVLTIIAFLITPMGLFPPNSK-GKIIAENNTNR-KLMEVDLROHID 3050
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 313 FLPSFPLSL-----MLVSMFMNMHFLGCNFKETCSLSKKKTKRELSKRIQEEYEK 3686
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 306 LGRPNSCHIEOMAIAPAPMIVLLITRKRGVPGMSLIRNKVVSASGLS-FYVILLFALP 3644
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 369 LGDISYEMVTOGFFFLIMTLVMTFRBPGVPMDSFFPKGKRDATATSVLGFLLIP 4288
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 365 TOYTFEFCYCCG---GPTAOMI--DAISMEYVLRNIPMGLLFLGGGFALVAARETG 419
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 429 AK-----KRGCKKQDQENQENHSGVEPIITWDDPKTMPEVLIVGGGYALASGSSG 484
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 420 LNMISAKQVLLIGLRNIVVQSTTFYLANFSAFPAANYVANYULPILCEMSLALIEHL 479
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 485 LSTWIGNQMSLSSLPAPNAVTLACLIVSIVFEPNSPATTTTFLPILCSISLTHINPL 5444
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 480 ILTLPAOLGISMVYFLPVSTPPNAVITQYAHIKTYFACCGIVPTIIGISVALVNTWTG 539
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 545 YTLIPVTMCISFAMVLPVGNPPNAVIVFSYGHQIDMKVAGVNVIGLVIVNAVINTWG 604
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 540 LIIFPESKSPDPAKIKNQ 560
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 605 VSLF-HLDTYPAVAR-VSNIT 623
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

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RESULT 7
US-09-5566-916-2
; Sequence 2, Application US/09556916
; Patent No. 6548271
; GENERAL INFORMATION:
; APPLICANT: Turner, Alex
; APPLICANT: Zambrowicz, Brian
; APPLICANT: Nehls, Michael
; APPLICANT: Friedrich, Glenn
; APPLICANT: Sands, Arthur T.
; TITLE OF INVENTION: No. 6548271el Human Transporter Proteins
; FILE REFERENCE: 6535-041-999
; CURRENT APPLICATION NUMBER: US/09/556,916
; CURRENT FILING DATE: 2000-04-21
; NUMBER OF SEQ ID NOS: 32
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 2
; LENGTH: 627
; TYPE: PRT
; ORGANISM: Homo sapiens
; IS-09-556-916-2

```

Query Match	25.6%	Score 740.5	DB 2	Length 627
Best Local Similarity	28.1%	Pred. No. 1.9e-67		
Matches 175	Conservative 123	Mismatches 223	Indels 101	Gaps 14

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QY      20 IIPPIITPIILYGFQOTMAEKKCLMILVTMALLIETPLIYVTLALFPIVFCOLLGLAVN 85
      17 VCVPEILLPLRPVL--HRSSEASCAYULIYTAIVYVWEAVPLGAALVPAFLYPPFGVIR 73
QY      86 ASIVCKQYPTDIIYVPLGGLIVALGIEYSNLTNRIDALRVIRIVGSGPRRLFYGLMSVSTF 145
      74 SNEVAEAYPKNTTLTLVGVICVAAYAEKMLHKRIALRVMLMGARKPMILLCFMOCSTLL 133
QY      146 MCLMISNAGTMMCPYIKALVNL---DNKLFPPYMTQEEEPV----- 187
      134 ISMWLSNTSTTAMWPIVEAVLOEIVSAEDQLVAGNSNTEEAEPISLDVKNSQPSLELI 193
QY      188 -----EEGEPHPSK----- 197
Db      194 FYNEBRSNADLTTLMHENENLNGVPSITNPRIKTAHQGKQKHPSQEKFOVLTIPSRRKQL 253
QY      198 -----ITAFYAGIAYASSIGGLGLTIGTGTLNLFVRGIIYTERPPTSTVEITPAN 246
      254 NRKYSRHHQDMICKLSISYSATIGGLTIIIGTSTSLIFLHHFNNQYPAEIV-VNIGT 312
QY      247 EMFYSLPMLVYNVTLVLIAFLITMGLFRPNKS-TGKIITAEANTNR-KLMEDEVLRQHTI 304

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Db      313 WFLFSFISLI-----NLVVSWFMWMHMLFLGCFNFKTCSLSKKKTKTKRQSLSEKRIQSEYE 368
QY      305 DLGRMSCHEIQAMIAIAFMIVILLIRKRGFVPGMSDLINRKRVGSAGSL- FIVLLIFAL 363
Db      369 KLDGISPEWNGGFFELIMLTVMFTREBRPVGMSDFEEKGGYTDATVSYFLGFLLELI 428
QY      364 PTQYTFEKYCCGK---GFPTAOAI--DAIISWEYLRNI PMGLFLFLGGGFGALAVASRET 418
Db      429 PAK-----KPCFGKKNNGENQSHSLGTEPIITMKDPQKTMPEIYIVLGGGVALAASGKSS 484
QY      419 GLNIMISKAMQVILGIPNIVVOSTIFVLANPFSAPNANVVANIVLPEILCMSIALFLHP 478
Db      485 GLSTWIGNQMLSSLSPPAAVTLTCLIVSYATEVSNIPATITTFLEPLISLSETHINP 544
QY      479 LILTPACLGISNWVFLPVSTPNAIVIQVYAHIKTKYFACCGIPIITIGISVALVNTNW 538
Db      545 LYTLLPWTMCISPAVMLPVGNPPNAIVPSYHCQIKMVKVKGGLGVNNTIGLVYVMAVINTW 604
QY      539 GLIIFPEKSFPPMAKEIKQOT 560
Db      605 GVSLEF-HUDTYPAMAR-VSNIT 624

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RESULT 8
US-09-949-016-6840
; Sequence 6840, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6840
; LENGTH: 627
; TYPE: PRF
; ORGANISM: Human
; US-09-949-016-6840

```

Query Match	25.5%;	Score 738.5;	DB 2;	Length 627;
Best Local Similarity	28.0%;	Pred. No. 3.1e-67;		
Matches 174;	Conservative 124;	Mismatches 223;	Indels 101;	Gaps 14

[illegible]

Db 313 WFLFSFPISLI-----MLVSWFMWMLFLGCFKFKTCSLSKKKTKRQOLSEKRIQOEYB 368
Qy 305 DLGPMSCHEIOMAIAPAFMIVLLITRKPGFVPGWMDLINRKVVGASGLS-FIVLLIFAL 363
Db 369 KLGDISYEMWTFEPIILMTVLMFTRPGFVPGWMDSPFEKKGYRTDAIVSVLGLFLFIP 428
Qy 364 TQYTFPFKYCCGK---GPFTAQAI--DAILSWEYLRNI PMGLFLLGGFALAVASRET 418
Db 429 PAK-----KPCFKKNDGENQHSLSGTETITWKDQKMPMEIVILVGGVYALASGSKSS 484
Qy 419 LNMISKAMQVLLGLPNIVQSTFVLANFSAFNANVAVNYLPLICEMSLALEHPL 478
Db 485 LSTWIGNQMLSLSLPMAVTLACILVSIYTEFVSNPATITIFLPILCSLSETHINPL 544
Qy 479 LILITPACLGISMVFLPSTPPNNAIVQYAHIKTKFYACCGIVPTIIGISVALVNTWTW 538
Db 545 YTLIPVTMCISFAVMLPVGNPNNAIVFSYGHQIKDVKAGLVNVLGLVIMVAINTW 604
Qy 539 GLIIPESKSPDPAKEIKNOT 560
Db 605 VSLF-HLDTYPAMAR-VSNIT 624

RESULT 9
US-09-556-916-22

Sequence 22, Application US/09556916
Patent No. 6548271
GENERAL INFORMATION:
APPLICANT: Turner, Alex
APPLICANT: Zambrowicz, Brian
APPLICANT: Nehls, Michael
APPLICANT: Friedrich, Glenn
APPLICANT: Sands, Arthur T.
TITLE OF INVENTION: No. 6548271el Human Transporter Proteins
FILE REFERENCE: 8535-041-999
CURRENT APPLICATION NUMBER: US/09/556,916
CURRENT FILING DATE: 2000-04-21
NUMBER OF SEQ ID NOS: 32
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 22
LENGTH: 626
TYPE: PRF
ORGANISM: Homo sapiens
US-09-556-916-22

Query Match 25.4%; Score 737; DB 2; Length 626;

Best Local Similarity 28.0%; Pred. No. 4.5e-67;
Matches 174; Conservative 124; Mismatches 223; Indels 100; Gaps 14;

Qy 26 IILPLITPLILYGFQTDMAEFKCLMLVTMLMTETLPYVTLAPFLVFCPLGLV 85
Db 17 VCVPLLLPLPVL--HPSEASCAYVLIVTAVVWSEAVPLGAALVPAFLYPPFGVLR 73
Qy 86 ASIVCKQYPTDITVIFLGLIVALGIEYSNLHTRIALRVIRIVGSPRRLFVGLMSVSTF 145
Db 74 SNEVAAEYKNTLLILVGVICVAAAEKKNHRIALRVIVMAGAKPGLLLCFMCCCTL 133
Qy 146 MGLWISNSAGTAMCPYKALVNEI---DTNKIPVYMTQEEEPV----- 187
Db 134 LSMWLSNTSTTAMVPIVEAVIQELVSADEQLVAQNSNTEBEAPISLDVKNQSPSLLELI 193
Qy 188 -----EGSRPHPSK----- 197
Db 194 FVNEBSNADLTTLMHENENINGVPSITNPDKTANQHQKQHPQOEKPOVLTPSPRKQKL 253
Qy 198 -----ITVAFYAGIAYASSIGGLTIGTGNLVFRGIYTERFPTSTVEITFANF 247
Db 254 RKYRSHDQMKCKLSISYSATIGLTTIIGTISLIFLEHPNNQYPAAEV-VNFGTW 312
Qy 248 MFYSIPLMIVNVTLVIAFLITHMGLFRPNSK-TGKIIEANTNR-KLMEVDVLRQRIID 305
Db 313 FLPSFPISLI-----MLVSWFMWMLFLGCFKFKTCSLSKKKTKRQOLSEKRIQOEYB 368

Qy 306 LGPMSCHEIOMAIAPAFMIVLLITRKPGFVPGWMDLINRKVVGASGLS-FIVLLIFALP 364
Db 369 KLGDISYEMWTFEPIILMTVLMFTRPGFVPGWMDSPFEKKGYRTDAIVSVLGLFLFIP 428
Qy 365 TQYTFPFKYCCGK---GPFTAQAI--DAILSWEYLRNI PMGLFLLGGFALAVASRETG 419
Db 429 AK-----KPCFKKNDGENQHSLSGTETITWKDQKMPMEIVILVGGVYALASGSKSG 484
Qy 420 LNMISKAMQVLLGLPNIVQSTFVLANFSAFNANVAVNYLPLICEMSLALEHPL 479
Db 485 LSTWIGNQMLSLSLPMAVTLACILVSIYTEFVSNPATITIFLPILCSLSETHINPL 544
Qy 480 IILITPACLGISMVFLPSTPPNNAIVQYAHIKTKFYACCGIVPTIIGISVALVNTWTW 539
Db 545 YTLIPVTMCISFAVMLPVGNPNNAIVFSYGHQIKDVKAGLVNVLGLVIMVAINTW 604
Qy 540 LIIPESKSPDPAKEIKNOT 560
Db 605 VSLF-HLDTYPAMAR-VSNIT 623

RESULT 10
US-09-556-916-10

Sequence 10, Application US/09556916
Patent No. 6548271
GENERAL INFORMATION:
APPLICANT: Turner, Alex
APPLICANT: Zambrowicz, Brian
APPLICANT: Nehls, Michael
APPLICANT: Friedrich, Glenn
APPLICANT: Sands, Arthur T.
TITLE OF INVENTION: No. 6548271el Human Transporter Proteins
FILE REFERENCE: 8535-041-999
CURRENT APPLICATION NUMBER: US/09/556,916
CURRENT FILING DATE: 2000-04-21
NUMBER OF SEQ ID NOS: 32
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 10
LENGTH: 627
TYPE: PRF
ORGANISM: Homo sapiens
US-09-556-916-10

Query Match 25.4%; Score 736.5; DB 2; Length 627;

Best Local Similarity 28.0%; Pred. No. 5e-67;
Matches 174; Conservative 124; Mismatches 223; Indels 101; Gaps 14;

Qy 26 IILPLITPLILYGFQTDMAEFKCLMLVTMLMTETLPYVTLAPFLVFCPLGLV 85
Db 17 VCVPLLLPLPVL--HPSEASCAYVLIVTAVVWSEAVPLGAALVPAFLYPPFGVLR 73
Qy 86 ASIVCKQYPTDITVIFLGLIVALGIEYSNLHTRIALRVIRIVGSPRRLFVGLMSVSTF 145
Db 74 SNEVAAEYKNTLLILVGVICVAAAEKKNHRIALRVIVMAGAKPGLLLCFMCCCTL 133
Qy 146 MGLWISNSAGTAMCPYKALVNEI---DTNKIPVYMTQEEEPV----- 187
Db 134 LSMWLSNTSTTAMVPIVEAVIQELVSADEQLVAQNSNTEBEAPISLDVKNQSPSLLELI 193
Qy 188 -----EGSRPHPSK----- 197
Db 194 FVNEBSNADLTTLMHENENINGVPSITNPDKTANQHQKQHPQOEKPOVLTPSPRKQKL 253
Qy 198 -----ITVAFYAGIAYASSIGGLTIGTGNLVFRGIYTERFPTSTVEITFANF 246
Db 254 NKYRSHDQMKCKLSISYSATIGLTTIIGTISLIFLEHPNNQYPAAEV-VNFGTW 312
Qy 247 MFYSIPLMIVNVTLVIAFLITHMGLFRPNSK-TGKIIEANTNR-KLMEVDVLRQRIID 304
Db 313 FLPSFPISLI-----MLVSWFMWMLFLGCFKFKTCSLSKKKTKRQOLSEKRIQOEYB 368
Qy 305 DLGPMSCHEIOMAIAPAFMIVLLITRKPGFVPGWMDLINRKVVGASGLS-FIVLLIFAL 363

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Db      369 KAGDISYPMWVGFFFILMTVLMFTREPGFVPMDSFFEKKGRITATVSVLIGLFLFI 428
      364 PQYTFPKYCCCK---GPTTAQAI--DAILSWBYLRNIPWGLPLFGGFALAAVASRET 418
      429 AK----KCFKQKNDGENQEHSLGTEPIITWKDFOKTWPMEIVILVGGYALAGSSKSG 484
      419 LNMISKAMQVLIGLPIVVOISITFVLNPFSAFNANVVANVILPILCEMSLLEHPL 478
      485 GLSTWIGNOMLSLSPMAVTLACILVSVTEFVSNPATITITFLPILCSLSETOHINP 544
      479 ILTLFACGISMVYFLPVSTPPNAILVTOYAHIKTKYFACCGIVPTIIGISVALVNTWTG 538
      545 YTLIPVTCISFAVWMLPVGNPNAILVFSYGHQCKDMWKAGLVNVIGLVVMAINTWG 604
      539 GLIIPESKSPDMAKEIKNOT 560
      605 GVSLF-HLDTYPAMAR-VSNIT 624
```

RESULT 11

```
US-09-556-916-16
/ Sequence 16, Application US/09556916
/ Patent No. 6548271
/ GENERAL INFORMATION:
/ APPLICANT: Turner, Alex
/ APPLICANT: Zambrowicz, Brian
/ APPLICANT: Nehls, Michael
/ APPLICANT: Friedlich, Glenn
/ APPLICANT: Sands, Arthur T.
/ TITLE OF INVENTION: No. 6548271el Human Transporter Proteins
/ FILE REFERENCE: 8535-041-999
/ CURRENT APPLICATION NUMBER: US/09/556,916
/ NUMBER OF SEQ ID NOS: 32
/ SOFTWARE: FastSeq for Windows Version 3.0
/ SEQ ID NO 16
/ LENGTH: 626
/ TYPE: PRT
/ ORGANISM: Homo sapiens
US-09-556-916-16
```

```
Query Match      25.4%; Score 735; DB 2; Length 626;
Best Local Similarity 28.0%; Pred. No. 7,2e-67;
Matches 174; Conservative 123; Mismatches 224; Indels 100; Gaps 14;

      26 IIPILITPLIYGFQTDMAEFKCLMLVTMALMITETLPIYVTLAPLVFCPLGLVN 85
      17 VCVPLLLPLPVL--HPSSASCAYVLIIVTAVVWSEAVPLGAALVPAFLYPPFGVLR 73
      86 ASIYCKQYFDTIVVPLGLIYVLMGIEYSNLHRTIALRVIRIVGSGPRRLFVGLMSVSTF 145
      74 SNEVAAEFYKNTLLLVGVCVAAVAVERKMLHKKRIALRMVLMAGAKPGMLLCEMCCTTL 133
      146 MGLMISNAGTAMCPYKALVNEL---DTNKIPYVMTQEEBPV----- 187
      134 LSMWLSNSTTAMVPIEAVVLOELVSADEBQVAGNSNTEBAEPLSDVQNSQPSLELI 193
      188 -----EKGEPHPHSK----- 197
      194 FVNEEDRSNDLTTLMHENENLNGVPSITNPITKANQHGKQKQHPQVLTSPRQKXLN 253
      198 -----ITVAFYAGIAYASISGGIGTLIGTGTLNLFVRGIYTERPPTSTVEITPANF 247
      254 NKTRSHHDOMICKCLSLSYSATIGGLTITIGTSTSLIFLEHFNNOYPAAEV-VNFGT 312
      248 MFYSIPLAVIYVNTVLIIFLITHMGLFPRPSK-TGKIIAENANTR-KLMEDEVLRQRHI 305
      313 WPLFSPFISLI-----MLVSVFMWMLFLGCFNFKETCSLSKKKTKREQLSEKRIQEEYE 368
      306 DLGPMSCHEIQMAIAFAFMIVLLITRKPGFVPMGMDLIRNKVVGSAAGLS-FIVLLIFAL 364
      369 KAGDISYPMWVGFFFILMTVLMFTREPGFVPMDSFFEKKGRITATVSVLIGLFLFI 428
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QY      365 TQYTFPKYCCCK---GPTTAQAI--DAILSWBYLRNIPWGLPLFGGFALAAVASRETG 419
      429 AK----KCFKQKNDGENQEHSLGTEPIITWKDFOKTWPMEIVILVGGYALAGSSKSG 484
      420 LNMISKAMQVLIGLPIVVOISITFVLNPFSAFNANVVANVILPILCEMSLLEHPL 479
      485 LSTWIGNOMLSLSPMAVTLACILVSVTEFVSNPATITITFLPILCSLSETOHINP 544
      480 ILTLFACGISMVYFLPVSTPPNAILVTOYAHIKTKYFACCGIVPTIIGISVALVNTWTG 539
      545 YTLIPVTCISFAVWMLPVGNPNAILVFSYGHQCKDMWKAGLVNVIGLVVMAINTWG 604
      540 LIIPESKSPDMAKEIKNOT 560
      605 VSLF-HLDTYPAMAR-VSNIT 623
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RESULT 12

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US-09-556-916-4
/ Sequence 4, Application US/09556916
/ Patent No. 6548271
/ GENERAL INFORMATION:
/ APPLICANT: Turner, Alex
/ APPLICANT: Zambrowicz, Brian
/ APPLICANT: Nehls, Michael
/ APPLICANT: Friedlich, Glenn
/ APPLICANT: Sands, Arthur T.
/ TITLE OF INVENTION: No. 6548271el Human Transporter Proteins
/ FILE REFERENCE: 8535-041-999
/ CURRENT APPLICATION NUMBER: US/09/556,916
/ NUMBER OF SEQ ID NOS: 32
/ SOFTWARE: FastSeq for Windows Version 3.0
/ SEQ ID NO 4
/ LENGTH: 627
/ TYPE: PRT
/ ORGANISM: Homo sapiens
US-09-556-916-4
```

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Query Match      25.4%; Score 734.5; DB 2; Length 627;
Best Local Similarity 28.0%; Pred. No. 8,1e-67;
Matches 174; Conservative 123; Mismatches 224; Indels 101; Gaps 14;

      26 IIPILITPLIYGFQTDMAEFKCLMLVTMALMITETLPIYVTLAPLVFCPLGLVN 85
      17 VCVPLLLPLPVL--HPSSASCAYVLIIVTAVVWSEAVPLGAALVPAFLYPPFGVLR 73
      86 ASIYCKQYFDTIVVPLGLIYVLMGIEYSNLHRTIALRVIRIVGSGPRRLFVGLMSVSTF 145
      74 SNEVAAEFYKNTLLLVGVCVAAVAVERKMLHKKRIALRMVLMAGAKPGMLLCEMCCTTL 133
      146 MGLMISNAGTAMCPYKALVNEL---DTNKIPYVMTQEEBPV----- 187
      134 LSMWLSNSTTAMVPIEAVVLOELVSADEBQVAGNSNTEBAEPLSDVQNSQPSLELI 193
      188 -----EKGEPHPHSK----- 197
      194 FVNEEDRSNDLTTLMHENENLNGVPSITNPITKANQHGKQKQHPQVLTSPRQKXLN 253
      198 -----ITVAFYAGIAYASISGGIGTLIGTGTLNLFVRGIYTERPPTSTVEITPANF 246
      254 NKTRSHHDOMICKCLSLSYSATIGGLTITIGTSTSLIFLEHFNNOYPAAEV-VNFGT 312
      247 MFYSIPLAVIYVNTVLIIFLITHMGLFPRPSK-TGKIIAENANTR-KLMEDEVLRQRHI 304
      313 WPLFSPFISLI-----MLVSVFMWMLFLGCFNFKETCSLSKKKTKREQLSEKRIQEEYE 368
      305 DLGPMSCHEIQMAIAFAFMIVLLITRKPGFVPMGMDLIRNKVVGSAAGLS-FIVLLIFAL 363
      369 KAGDISYPMWVGFFFILMTVLMFTREPGFVPMDSFFEKKGRITATVSVLIGLFLFI 428
      364 PQYTFPKYCCCK---GPTTAQAI--DAILSWBYLRNIPWGLPLFGGFALAAVASRET 418
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Db 429 PAK----KPCFGKNDGENOESHLGTEPIITWDPQOTMWEIVILVGGSYALASGSKS 484
Qy 419 GLNIMISKAMQVIGLPIVVGSIITFLANFSAFANVAVNIIVLPILCEMSLALHP 478
Db 485 GLSTWIGNOMLSISSIPPAVTLTACTIVSYIEFNSNPTITIFLILCSLSETHINP 544
Qy 479 LILTLPACTGISMVFLPVSTPPNAIVTOYAHIKTKYFACCGIVPTTIGISVALVNTW 538
Db 545 LVTLLIETWCISPAWMLPVGNPNNAIVFSYGHCOIKDMVYAGGVNVIGIVMAVINTW 604
Qy 539 GLIIPESKSPDPMAKEIKQT 560
Db 605 GVSLEF-HLDTPYPMAR-VSNIT 624

RESULT 13
US-09-949-016-9977
; Sequence 9977, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949, 016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 9977
; LENGTH: 601
; TYPE: PRT
; ORGANISM: Human
US-09-949-016-9977

Query Match 24.0%; Score 696; DB 2; Length 601;
Best Local Similarity 29.5%; Pred. No. 7.3e-63;
Matches 174; Conservative 121; Mismatches 224; Indels 70; Gaps 14;

Qy 27 IIPILITPLIYGFQDMAEFKCMLVTNALMITETLPIVYTALEPLVFCPLGLVNA 86
Db 26 VLVLPLPIVLH-----TKAECAVTLFVATFMLEALPLSVTALPLSLMPLFGLMPS 80
Qy 87 SIYCKOFTDTIVFPLGLIVALGIEYSNLTIRIALVRIVGSPRLFVGLMSVTFM 146
Db 81 KKVASVFKDPHLLIGVLCATLSIEKMNHLKRIALMVMVMVGNPMLTLGFMSSPAFL 140
Qy 147 GLMISNAGTAMCPYKALVNLDTNKKIPVYMTQ-----EE 185
Db 141 SMLNSTSTAMWPIAEAVVOQI-INAEAVEATQTYFRNGSTNGLBEDSYNGHEIN 199
Qy 186 PVEGEPPH-----SKITVAFYAG-----IAVSSIGL 215
Db 200 ERREKTKVPGVNNNDTKISSKVELEKSGKRTYKRRKKGHVTRKLTCLCLASSTIGL 259
Qy 216 GTLIGTGNLVFNGIYTEREPTSTVEITFANFMFYSIP-LMVIVNVLVIAFLITMGL 274
Db 260 TTITGSTNLIIFAEVFTRYPDCC-LNFGSMFTFSPALLIILLSMWLQWLF--LGF 316
Qy 275 -FRNSTGKIIEANTNRKLMEDVLAQRHIDLGNSCHEIQMAIAFAMIVLLITKPG 333
Db 317 NFKEMFCKGK---TKTVQOAKACAEVIRKOEYOKLGPRIYOEIVTLVLIYALMPSHDPG 373
Qy 334 FVFGMSDLIRKVVGSA--SGLSFIVLILFALPTQYEFKCCGKGFPTAOAIDILSWE 391
Db 374 FVFGMSDLIRKVVGSA--SGLSFIVLILFALPTQYEFKCCGKGFPTAOAIDILSWE 431
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Qy 392 VYLRNIPWGLLELGGGFALAVASRETGLNIMISKAMQVIGLPIVVGSIITFLANF 451
Db 432 EROSEFMPDIAITLVGGGFALADCEBSGLSKNIGKLSPLGLIPAMLILISSIMVTSLT 491
Qy 452 AFNANVAVNIIVLPILCEMSLALHPILITLPACIGISMVFLPVSTPPNAIVTOYAH 511
Db 492 EVASNPATITLFLPILSPALAEIHNPVILYILPSTCTSFALFLPVANPNNAIVFSGHL 551
Qy 512 KTKYFACCGIVPTTIGISVALVNTWGLIIPESKSPDPMAKEIKQT 560
Db 552 KVIDWYKAGLVIVGVAVVMGLICTWIVPMF-DLYTSPMAVPMNSNET 599

RESULT 14
US-09-270-767-57987
; Sequence 57987, Application US/09270767
; Patent No. 6703491
; GENERAL INFORMATION:
; APPLICANT: Homburger et al.
; TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
; FILE REFERENCE: File Reference: 7326-094
; CURRENT APPLICATION NUMBER: US/09/270,767
; CURRENT FILING DATE: 1999-03-17
; NUMBER OF SEQ ID NOS: 62517
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 57987
; LENGTH: 132
; TYPE: PRT
; ORGANISM: Drosophila melanogaster
US-09-270-767-57987

Query Match 22.8%; Score 661; DB 2; Length 132;
Best Local Similarity 100.0%; Pred. No. 3.2e-60;
Matches 132; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 383 AIDAILSWERYLRNIPWGLLELGGGFALAVASRETGLNIMISKAMQVIGLPIVVGSI 442
Db 1 AIDAILSWERYLRNIPWGLLELGGGFALAVASRETGLNIMISKAMQVIGLPIVVGSI 60
Qy 443 TFLANFSAFNANVAVNIIVLPILCEMSLALHPILITLPACIGISMVFLPVSTPPN 502
Db 61 TFLANFSAFNANVAVNIIVLPILCEMSLALHPILITLPACIGISMVFLPVSTPPN 120
Qy 503 AIVTOYAHIKTK 514
Db 121 AIVTOYAHIKTK 132

RESULT 15
US-09-556-916-24
; Sequence 24, Application US/09556916
; Patent No. 6548271
; GENERAL INFORMATION:
; APPLICANT: Turner, Alex
; APPLICANT: Zambrowicz, Brian
; APPLICANT: Nehls, Michael
; APPLICANT: Friedrich, Glenn
; APPLICANT: Sande, Arthur T.
; TITLE OF INVENTION: No. 6548271el Human Transporter Proteins
; FILE REFERENCE: 8535-041-999
; CURRENT APPLICATION NUMBER: US/09/556, 916
; CURRENT FILING DATE: 2000-04-21
; NUMBER OF SEQ ID NOS: 32
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 24
; LENGTH: 580
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-556-916-24

Query Match 21.5%; Score 624; DB 2; Length 580;
Best Local Similarity 25.4%; Pred. No. 1.9e-55;
Matches 158; Conservative 121; Mismatches 196; Indels 146; Gaps 16;
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